of the microscope. To guide and direct the hands and eyes of these beginners and to forestall some of the oft-repeated questions is the purpose of the present manual. That it will achieve its purpose seems without doubt, for there is a terseness and directness of expression that is unequivocal, and each direction is given in logical sequence. While primarily for the use of students at the University of Chicago, it could be utilized readily elsewhere. W. H. F. A.

The Medical and Surgical Aspects of Aviation. By H. Graeme Anderson, M.B., C.H.B., F.R.C.S., Surgeon, Royal Air Force, Central Hospital; Senior Assistant Surgeon, St. Mark's Hospital; Senior Assistant Surgeon, Belgrave Hospital. Pp. 255; 47 illustrations. London: Oxford Medical Publications, 1919.

The first book to make its appearance after the World War is on a subject which received the most intense study during hostilities by groups of experts in all countries. Surgeon Anderson was what we called in our service a "Flight Surgeon," and in his book he has given us the results of his work with the flyers, the actual application of the various tests which were devised to prevent, as far as possible, airplane accidents and the onset of aëroneurosis. His observations throughout the book are very practical and his recommendations for prevention and treatment of each type of case arising in the flying service are well considered.

He deals with the selection of the flyer *per se* and with the management of the pilot after entering the service, from his training days to actual war-flying and his care and management after he has become "stale" or injured.

Collaborating with him, with chapters on applied physiology of aviation and the aëroneuroses, are Martin Flack, M.A., M.B., and Oliver H. Gotch, M.B., Ch.B., M.R.C.P., physician, Royal Air Force, respectively. Martin Flack (Physiology, Cambridge) was the foremost investigator in the new field of aviation medicine in England. His tests were adopted as standards and his tireless energy and enthusiasm had much to do with the success in selecting the wonderful personnel of the Royal Air Force.

In the future development of commercial aviation the problems of the flyer will more and more become of interest to the medical profession, and in this book the future "flight surgeons" will find a great many helpful suggestions. Starting with a historical review of medical interest in aviation, and giving the English standards for selection of candidates for the air service, together with the special chapters on applied physiology by Flack and the aëroneurosis by Gotch, Anderson then gives his experiences in aëroplane accidents, beautifully illustrated by actual plates, including a photograph of the most remarkable accident which has occurred in which a seaplane collided with and stuck in the mast of a large wireless station. A chapter on the surgery of aviation, in which he fully reports, with roentgen-ray plates, thirteen cases of "aviator's astragalus," is important.

Chapters on injuries and destructive effects of aeroplane bombs, on aëroplane dope-poisoning (tetrachlorethane poisoning, which is used in waterproofing the wings, etc.), together with a glossary of aviation terms and a complete bibliography of aviation medicine to date, complete this valuable book. R. S. McC.

THE OPERATIVE STUDY OF GOITRE. THE AUTHOR'S OPERATION. By WM. F. HALSTEAD. Johns Hopkins Hospital Reports., Vol. XIX, Fasciculus 2. Pp. 257; 11 plates. Baltimore: Johns Hopkins Press, 1919.

HERE is told the tale of the surgeon's struggle, through many decades, to deal successfully with goitre, his failures, his partial successes and his ultimate achievement, a tale culled from wide reading in many languages and a long, broad personal experience. While the book undoubtedly will remain the authentic reference work on the subject, we believe it will not attract the many readers who expect in a book of this sort an entertaining story easily read; the "story" is too disjointed, too much a patchwork for enjoyment as a story.

The author has carefully set down synopses of all known operated cases until 1883 except for the German-speaking countries whose cases are too numerous for tabulation. Probably the earliest opertion was in 1596. Although Hedenus did six excisions in the early 19th century and spilled very little blood, lay and professional opinion was strongly against surgical interference except in most urgent cases of dyspnea, until as late as 1870. It was massive hemorrhage that first checked all surgical efforts. In 1845 the Italian Porta ligated both superior and inferior arteries to cause atrophy of the gland and in 1862 the American Cooper used mass ligatures to cause reduction by sloughing. In 1866 his fellow countryman, Warren Greene, did perhaps the most important work in hemostasis. With the control of hemorrhage, the discovery of anesthesia and the acceptance of Listerism, the three greatest problems of surgery were solved and it remained to learn that in operation was a cure for hyperthyroidism, that total extirpation of the gland was followed by hypothyroidism and often by tetany and vocal cord paralysis, and finally there were developed refinements in technique, in instruments, incisions, approach to the gland and in the surgery of the